



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/067,682 | 02/04/2002 | Colleen A. Roe | 1098-010/MMM | 7084 |
| 21034 | 7590 | 03/22/2006 | EXAMINER | |
| IPSOLON LLP 111 SW COLUMBIA SUITE 710 PORTLAND, OR 97201 | | | HO, ANDY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2194 | |

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/067,682 | Applicant(s) ROE ET AL. | |
| | Examiner Andy Ho | Art Unit 2194 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-14,16-19,21,23-28,30-35 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7-14,16-19,21,23-28,30-35 and 37-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.


Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview (PTO-894)
Paper No(s)/Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. This action is in response to the amendment filed 12/29/2005.
2. Claims 1-2,4-5,7-14,16-19,21,23-28,30-35,37-41 have been examined and are pending in the application.

Claim Rejections - 35 USC § 112

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant recites "The medium of claim 20" on line 1, which is an inappropriate dependent because claim 20 has been cancelled. For the purpose of art rejection, it is interpreted as "The medium of claim 14" as best understood and as it appears to be.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 4-5 and 7-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Bennett U.S Patent No. 6,490,574.

As to claim 1, Bennett teaches a scalable agent service system (system 100, Fig. 1) that supports an arbitrary number of computer software agents (event processing intelligent agents, lines 35-36 column 3) for providing services or information (process events, line 36 column 3) to an arbitrary number of client computation devices (more than one user, line 37 column 3), comprising:

one or more adaptive engines (102, 108, Fig. 1) that receive and apply inferencing (lines 1-14 column 6) to external information (events, line 4 column 6) received from one or more data feeds (106, Fig. 1) to generate computer- implemented tasks relating to the external information (event-related tasks, line 39 column 4), the one or more adaptive engines each including a metadata repository for temporarily storing the external information as metadata (event database 112, Fig. 1) and an isochronal agent (queue control module 408, Fig. 4) that periodically analyses the metadala in the metadata repository at predefined time intervals to generate corresponding computer- implemented tasks (lines 23-36 column 12); and

one or more service fulfillment engines (110, Fig. 1) that operate asynchronously with the one or more adaptive engines to perform operations in accordance with the computer-implemented tasks (process the events, lines 65-66 column 4; lines 15-25 column 5).

As to claim 2, Bennett further teaches adaptive engines each include plural computer-implemented event agents (event processing intelligent agents, lines 35-36

column 3), one or more of which operate as rules engines (have multiple set of rules, lines 51-52 column 3) that apply the inferencing to the external information (process the events by means of evaluating rules, line 48 column 3).

As to claim 4, it is a system claim of claims 2-3. Therefore, it is rejected for the same reasons as claims 2-3 above.

As to claim 5, Bennett further teaches data managers (event controller 202, Fig. 2) that place the external information in the metadata repository asynchronously relative to operation of the event agents.

As to claim 7, Bennett further teaches adaptive engines include relational databases for storing one or more rules (104, Fig. 1) that are retrieved and used by the event agents.

As to claim 8, it is a system claim of claim 6. Therefore, it is rejected for the same reasons as claim 6 above.

As to claim 9, Bennett further teaches the computer-implemented tasks are ordered in one or more task queues (events in FIFO queue 402, Fig. 4) and the one or more adaptive engines include:

dispatchers that retrieve the computer-implemented tasks from the one or more task queues (...the queue control module 408 monitors the event queue 402 and also the current event being processed by the event processing controller 400 to determine the point in time at which the event processing module 110 no longer has any events in-queue or being processed for the selection key specified in the quiesce signal..., lines 26-32 column 12), and

service agents that receive the computer-implemented tasks from the dispatchers to process and forward the computer-implemented tasks to the one or more service fulfillment engines (event processing controller 400, Fig. 4).

As to claim 10, Bennett further teaches adaptive engines include pools of plural instances of service agents (event processing intelligent agents, lines 35-36 column 3), each computer-implemented task being executed on a separate processing thread with a corresponding instance of a service agent (lines 35-49 column 3).

As to claim 11, Bennett further teaches providing information to the client computation devices in any of plural communication formats (kinds of events, line 48 column 4).

As to claim 12, Bennett further teaches separate service task queues (events in FIFO queue 402, Fig. 4) for each of the plural communication formats.

As to claim 13, Bennett further teaches separate dispatchers that manage the separate service task queues for each of the plural communication formats (...the queue control module 408 monitors the event queue 402 and also the current event being processed by the event processing controller 400 to determine the point in time at which the event processing module 110 no longer has any events in-queue or being processed for the selection key specified in the quiesce signal..., lines 26-32 column 12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 28, 30-35 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett.

As to claim 28, it is a system claim of claims 1-2 and 7-8. Therefore, it is rejected for the same reasons as claims 1-2 and 7-8 above. Bennett does not explicitly teach periodic, non-periodic and spontaneous events. However, Bennett teaches a system of processing any event occurs in a computer system (lines 53-56 column 2). Therefore one of ordinary skill in the art would conclude that these events could be periodic, non-periodic and spontaneous events.

As to claim 30, Bennett further teaches a date/time daemon that scans the relational database to identify events that are scheduled during each time period and generating corresponding tasks for executing the events (lines 23-36 column 12). Bennett does not explicitly teach non-periodic events. However, Bennett teaches a system of processing any event occurs in a computer system (lines 53-56 column 2). Therefore one of ordinary skill in the art would conclude that these events could be non-periodic events.

As to claim 31, it is a system claim of claim 9. Therefore, it is rejected for the same reasons as claim 9 above.

As to claims 32-33, Bennett does not explicitly teach spontaneous events. However, Bennett teaches a system of processing any event occurs in a computer system (lines 53-56 column 2). Therefore one of ordinary skill in the art would conclude that these events could be spontaneous events.

As to claim 34, Bennett does not explicitly teach periodic and spontaneous events. However, Bennett teaches a system of processing any event occurs in a computer system (lines 53-56 column 2). Therefore one of ordinary skill in the art would conclude that these events could be periodic and spontaneous events.

As to claims 35 and 37-41, they are method claims of claims 28 and 30-34, respectively. Therefore, they are rejected for the same reasons as claims 28 and 30-34 above.

6. Claims 14, 16-19, 21 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett in view of Roccaforte U.S Patent No. 6,484,179.

As to claim 14, it is a computer program product claim of claims 1-2 and 4. Therefore, it is rejected for the same reasons as claims 1-2 and 4 above. Bennett does not explicitly teach the use of key-range partitions.

Roccaforte teaches a database system wherein data being stored in key-range partitions (line 65 column 11 to line 5 column 12). It would have been obvious to apply

the teachings of Roccaforte to the system of Bennett because this allows the data to be processed independently as disclosed by Roccaforte.

As to claims 16-19 and 21, they are computer program product claims of claims 3-6 and 8, respectively. Therefore, they are rejected for the same reasons as claims 3-6 and 8 above.

As to claim 23, Bennett as modified further teaches the plural instances of service agents are activated concurrently to service the corresponding key-range partitions of the relational database (process the events by means of evaluating rules, line 48 column 3).

As to claim 24, it is a method claim of claims 1-2 and 23. Therefore, it is rejected for the same reasons as claims 1-2 and 23 above.

As to claims 25-26, they are method claims of claims 23 and 14, respectively. Therefore, they are rejected for the same reasons as claims 23 and 14 above.

As to claim 27, Roccaforte further teaches assigning the keys to the subscribers to distribute them generally uniformly across the key-range partitions (key values, line 65 column 11 to line 16 column 12).

Response to Arguments

7. Applicant's arguments filed 12/29/2005 have been fully considered but they are not persuasive.

Applicant argued that Bennett reference does not teach the queue control module periodically analyses the metadala in the metadata repository at predefined time

Art Unit: 2194

intervals to generate corresponding computer-implemented tasks (Remarks, fourth paragraph page 9 to first incomplete paragraph page 11). In response, as disclosed in lines 29-44 column 12, Bennett teaches the queue control module is part of the event processing module wherein events being processed. The reference meets the limitation as claimed.

Applicant argued that cited references do not teach highly scalable agent service software as described in the specification of the application (Remarks, first complete paragraph page 11 to first incomplete paragraph page 12). In response, the applicant argued limitations that are disclosed in the specification of the application but not claimed.

Applicant argued that Bennett reference does not teach periodic, non-periodic and spontaneous events (Remarks, second complete paragraph page 12 to fourth paragraph page 13). In response, as disclosed in the claim rejection above, Bennett does not explicitly teach periodic, non-periodic and spontaneous events. However, Bennett teaches a system of processing events occurs in a computer system (lines 53-56 column 2). Since Bennett does not disclose the specific types of the events, one of ordinary skill in the art would assume that these events could be any types of events including periodic, non-periodic and spontaneous events.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2194

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIM) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2194

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (571) 273 - 8300.
- OFFICAL faxes must be signed and sent to (571) 273 - 8300.
- NON OFFICAL faxes should not be signed, please send to (571) 273 - 3762

A.H

March 17, 2006


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100